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ABSTRACT

A theory of thematic curriculum emerged during the development of a thematic unit on pets, entitled "Pets and Me." The unit, intended for preschool through grade five, focuses on the human-animal bond, incorporating language arts, math, science, social studies, physical education, art, and music activities. "Pets and Me" was developed, field-tested, and published by a group of educators that included two education department faculty, eight preschool and elementary school teachers, and a veterinary school faculty member. An analysis of the data collected during the unit's development led to the differentiation of three distinct constructs: (1) facts and information; (2) topics; and (3) themes. Each of these constructs plays a different role in children's learning. Facts focus on basic information and on narrowly defined ideas understood as discrete items. Topics provide a context for facts and information, and present a way of organizing discrete bits of information into classes of experiences recognizable by scholars within traditional disciplines. Themes, defined as broad existential questions, transcend disciplines, allowing learners to integrate the information and topic within a context of the full range of human experience. (Contains 19 references.) (MDM)

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TOWARD A THEORY OF THEMATIC CURRICULA: CONSTRUCTING NEW LEARNING ENVIRONMENTS FOR TEACHERS AND LEARNERS

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ABSTRACT

This paper presents a theory of thematic curriculum that emerged out of work with elementary school teachers to develop and implement a thematic unit. Analysis of data collected during the project leads us to differentiate "facts and information," "topics," and "themes." Each of these distinct constructs is critical to thematic curriculum, playing a different role in children's learning and mastery of their worlds. Facts focus on basic information and on narrowly defined ideas understood as discrete items. Topics provide a context for facts and information and present a way of organizing discrete bits of information into classes of experiences recognizable by scholars within traditional disciplines. Themes, defined as broad existential questions, transcend disciplines, allowing learners to integrate the information and topic within a context of the full range of human experience.

In the process of developing criteria for a theory of thematic curriculum, we describe the key features of a thematic unit developed collaboratively by a team of university researchers and public school teachers. We especially focus on how the unit has been used including ways it enables teachers to adapt not adopt curriculum while engaging teachers as learners working alongside their students exploring questions that require deep reflection and intellectual engagement.

> ...the language of education, if it is to be an invitation to reflection and culture creating, can not be the so called uncontaminated language of fact and "objectivity." It must express stance and must invite counter-stance and in the process leave place for reflection, for metacognition. It is this that permits one to reach higher ground, this process of objectifying in language or image what one has thought and then turning around on it and reconsidering it. (Bruner, 1986, p.129)

Bruner's admonition seems to strike at the very core of what we mean by education, as distinct from indoctrination, training, or conditioning. Yet, it is not always easy to know how to go beyond standard or traditional practice and create learning environments and activities that truly engage students in meaningful exploration. Many innovative teachers are trying thematic units as one approach to Bruner's "higher ground." Indeed, is hard to pick up a current journal or textbook connected to elementary curriculum or methods without finding references to the possibilities for improved and more in-depth student learning posed by using thematic units in teaching. Many researchers and teachers in language arts and other disciplines are exploring what they mean by the term thematic unit. There are many visions of thematic units and appropriate methods of instruction and assessment for thematic work. In general, teachers are urged to develop thematic units by identifying a topic, developing a visual representation (most often a web or flow chart) of ideas and facts related to the topic and then identifying materials and designing curriculum activities (Pigdon and Wooley, 1993). In addition, the literature reveals many questions about who can write themes (Altwerger and Flores, 1994), what content should be

included, and how this content should be structured. Some authors, especially those who operate from a whole language perspective, advocate planning units almost exclusively at the classroom level and at least part of units with children (Altwereger and Flores, 1994, Harste, Short and Burke 1988, Mills and Clyde, 1990). While we support the important ways that teachers are curriculum planners, we wonder if there are not also legitimate ways to draw upon the expertise of other teachers, scholars, and researchers in the development of thematic studies.

In order to explore the possibilities of another vision for thematic unit planning, two education department faculty, eight pre-school and elementary teachers, and a veterinary school faculty member whose specialty is the human-animal bond, worked together over a period of three years to write, field-test, and publish a thematic unit, *Pets & Me*. This action research process was documented through notes from meetings, phone conversations and interviews with test-site teachers, collections of children's work, and various draft versions of the unit itself. During the process, the team confronted many issues including development of a shared theory of teaching and learning, a process and format for sharing the team's work with others, and an emerging perspective on curriculum. In particular, we came to a new understanding of the inter-relationships of facts, topics, and themes in curriculum.

As children engage in the lessons from *Pets & Me*, they have multiple opportunities to talk, read, write, and create. They also do research, compare and contrast results, describe, analyze, and synthesize. In essence, they explore the underlying theme, visit and

revisit the topic, and support their understanding through learning discrete facts and information about many different types of animals. Importantly, they are mindful and reflective as they construct a deeper understanding of themselves and their responsibilities to those animals they keep as pets. In this paper, we will argue that this mindful and reflective approach is possible because teachers and students explicitly examine the underlying theme of human relationships with the natural world.

DESCRIPTION OF THE THEMATIC UNIT

Pets & Me is a thematic unit for pre-school through grade five that uses the human animal bond (mainly focusing on pet ownership) as a heuristic and a topic worthy of study itself. Its heuristic value is based on the fact that children are naturally fascinated by animals. This heuristic is widely exploited in books as is evident from the high percentage of children's books that feature animals--*Pat the Bunny*, animal alphabet books, the *Frog and Toad* series, and *Winnie the Pooh* stories are just some examples of this genre. But there is growing research base that demonstrates the strong attraction of animals for children as well as the positive influence pet ownership has upon children's social and cognitive development.

As a topic itself, learning about the human-animal bond can also involve language arts, math, science, social studies, physical education, art and music. Thus, for example, the language arts are involved when students read stories, articles, or other expository works about or involving animals, when students write reflections,

poetry, or stories about animals, or when students talk to each other about their reading, writing, or reflections. Math and science are involved when students conduct surveys of pet ownership. Inquiry about what animals other cultures consider to be pets contributes to social studies curriculum. Resources from multiple curriculum areas are consulted so that learning in one discipline connects to learning in another. In these ways, the activities in the curriculum also stimulate growth in the following skill areas: interpreting and creating, thinking and deciding, research and analysis, presenting and performing.

The curriculum is descriptive, not prescriptive. The lessons are not written as recipes, but are presented in a format designed to encourage teachers to develop their own lessons or to modify and adapt the suggested activities. Along with each "Sample Process" (lesson), we have left a blank page entitled "Your Modification" on which teachers can make notes of their own modifications as well as reflect on how well the lessons worked for them and their students.

Consistent with emerging research on thematic and integrated instruction, the unit is based on a constructivist approach to learning (Perkins and Blythe, 1994; Brooks and Brooks, 1993). We operate on the belief that learners best understand those meanings of a concept that they create for themselves out of the data of past and present experiences and with appropriate guidance from concerned and knowledgeable "teachers". Using this belief, we have divided the unit into three cycles which create different kinds of opportunities for individuals and classes to explore and re-explore the topic

question, "What makes a pet?" The outline for this exploration includes:

1. Lessons begin with what children already know. This knowledge is used to structure a broad conceptual and practical framework about pets. Children are then asked to find out what others know. What makes a pet, the values of pets, and observation of pet behavior in the man-made and natural environment are explored throughout the unit.

2. The second part of the spiral begins with a lesson that returns to the question, "What makes a pet?" Children are given opportunities to collect factual information about pets. The goal here is to encourage them to reflect on what they already know about pets, to increase their knowledge, and to modify their original thinking.

3. Lessons end by synthesizing what students have learned from the factual information they have gathered about pets and developed into a broad framework. This is done by returning once again to the question, "What makes a pet?"

These three cycles build upon children's early learning about animals. Each provides students with a set of structured experiences that help them develop deeper levels of understanding about animals and our relationships to them. The experiences (lessons) provide multiple and multi-sensory approaches to teacher and student learning about the bond between people and animals. These

experiences create multiple opportunities for an entire school to come together to examine the human-animal bond as well as for cross-grade work engaging older and younger children in the same questions. This overall collaborative and cooperative approach is designed to foster the growth of the school as a learning community.

THE DEVELOPMENT OF THE UNIT

As is generally the case in the literature on thematic unit teaching, when we began and during the time we were working on *Pets and Me*, our notions of topic, issue, and theme all ran together. During the first year of development of the thematic unit, we were working from a notion of core concepts that were interrelated. We identified four concepts and organized the unit around them. These four concepts were : (1) values of animals as pets, (2) what kinds of pets are available, (3) responsibilities of pet ownership, and (4) health issues related to pet ownership. In addition, we had a notion of revisiting a central question, "What is a pet?" three times during the unit as a way of having children address their own understanding at deeper levels. We believed that children constructed their own understandings through talk, action, and reflection. We also wanted to be interdisciplinary in our approach integrating children's literature, popular media, and science.

Working as a team, we wrote lessons and organized them in ways that enabled children and their teachers to engage in learning more about animals and pet ownership. We were generally pleased with the outcomes from both the school where the materials were

developed and from the initial test sites. At the end of the unit, pairs of children designed imaginary pets and wrote *Pet Care Manuals* for their creations. These culminating projects demonstrated that the children could articulate a developmentally appropriate and complex understanding of the needs of animals, their life cycles, and the issues of pet ownership and care.

During the second year, however, one of the teachers pushed the team to do more. She wanted to include the full range of issues around pet ownership--from deciding to adopt a pet to pet loss. She also wanted children to explore their understanding of the statement, "A pet is a way of taking nature inside." She pushed the team to include more environmental questions and to explore the use of the monarch butterfly garden and the experience of raising and releasing monarch butterflies as part of the unit. Although she did not articulate her reasons as moving toward including a thematic framework for the unit, that was the result of her efforts.

CRITERIA FOR A THEORY OF THEMATIC INSTRUCTION

Thematically based units are only one of many valuable and powerful ways of organizing curriculum. Developing *Pets & Me* taught us that if one is going to organize curriculum thematically, a clear understanding of how thematic units differ from others kinds of curricular organizations is essential.

When most authors talk about thematic units, they use the terms "unit," "theme," "topic," "essential concept" and "issue" almost interchangeably (Zemelman, Daniels, and Hyde 1993). They also talk

about integration across subject areas as essential. Some, such as Pigdon and Wooley, talk about the importance of relating children's studies to understanding "big ideas." What teachers and other curriculum planners are left with as a result of this literature is a fuzzy picture and sense that there is something important here, but what that "something" is remains ill defined.

We see the ideas represented by facts and information, topics, and themes as serving different functions in children's learning. While some authors use these concepts interchangeably (Zemelman, Daniels, and Hyde 1993; Harste, Short and Burke 1988; Mills and Clyde, 1990; Pappas, Keifer and Levstik, 1990; Gere et al, 1992) or avoid them altogether (Pigdon and Wooley, 1993), we want to propose seeing them as distinct and hierarchically related elements of curriculum development. Separating theme from topic and topic from information and facts provides curriculum developers and teachers with a typology they can use to help students make increasingly sophisticated sense of their worlds. Exploring themes gives teachers and students a framework for understanding interrelationships among different levels of ideas and abstractions (from specific to abstract).

This perspective on thematic units as a format for curriculum, draws upon the ways theme is used in other disciplines. A theme in literature is connected to the underlying message of the story or poem. This message often helps the reader understand more about the human condition. For example, in *The Scarlet Letter* Hester's actions (the facts) can be understood in the broader context (topic) of the way Hester's life plays out in the community. But exploring the

theme, the nature of responsibility for one's own life and the paradox of social membership, adds an important dimension to understanding our own lives and responsibilities to others (which is one reason we read the book).

Another link between our understanding of themes in literature and themes in curriculum is that as we study *The Scarlet Letter*, or any book, there are "right answers" at the fact and information level, but as we move closer to thematic issues, the focus shifts from looking for a "right answer" to looking for the patterns of reasoning learners use to explain their understandings. At the thematic level, there is no single right answer for many of the questions we explore, but clearly there are wrong answers or answers that do not fit within our beliefs about the nature of our civilization.

Our typology describes a relationship between facts and information, topics, and themes that has parallels in other domains of human discourse. The chart, Figure 1.1, below illustrates those parallels:

Figure 1.1

Parallels Among Themes in Many Disciplines

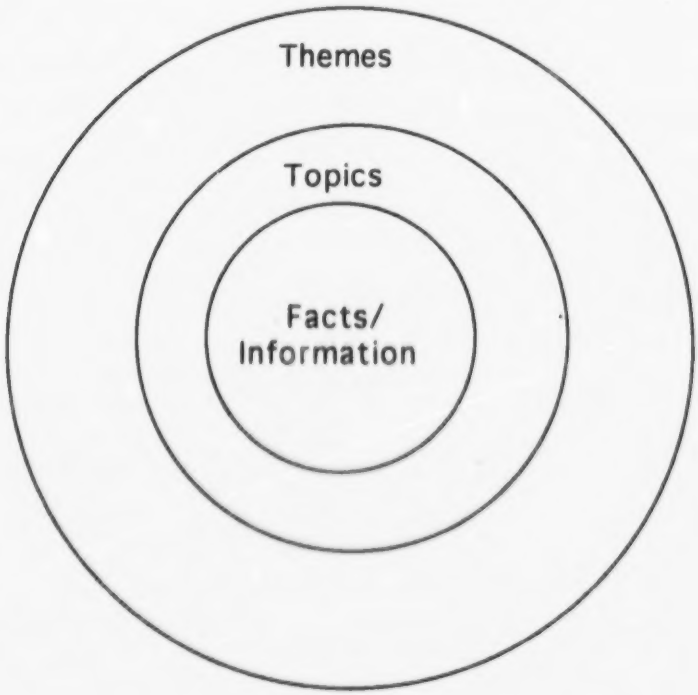
DISCIPLINE	FIRST LEVEL	SECOND LEVEL	BROADEST LEVEL
Curriculum	Facts and Information	Topics	Themes
Learning Theory	Information	Knowledge	Understanding
Literature	Events and Characters	Interactions	Themes
Music	Notes and Instruments	Melody, Rhythm, Tune	Feelings and Images Evoked
History	Events and People	Theories (e.g., Cause-Effect Relationship	Ideology
Science	Data	Hypotheses and Theories	Paradigms

One commonality is that themes, understandings, images and feelings evoked, ideologies and paradigms all involve interpretation. Recognizing the implications of the need for interpretation is essential to understanding the potential and power of themes in

curriculum. Our experiences developing and testing *Pets & Me* demonstrates both the potential and the power.

In this emerging understanding, "facts/information," "topic," and "theme" serve different functions in children's learning. As distinct and hierarchically related elements of curriculum development they represent different layers of context and meaning with facts and information at the center, while topic and theme are successively broader rings in a set of concentric circles.

Figure 1.2
Relationships Among
Facts/Information, Topics and Themes in Curriculum



Within this representation, the boundaries that separate the different levels are permeable and intimately connected. Each relies

on the others for the sensibility of the phenomena it contains. Consistent with our experience developing *Pets & Me*, teachers and children enter into this hierarchy at any layer. Conceptually, it does not matter where you enter; educationally, it is important that teachers and children move across all three layers, being conscious of the connections among them.

Characteristics of Facts/Information:

The focus here is on basic information and narrowly defined questions and ideas understood as discrete items. This is not unlike the substance of traditional curriculum for elementary school children. It is a focus on "the three R's," of information contained in textbooks and most textbook units. The factual level is exemplified by the focus of standardized testing programs as well as of curricula that prepare students for those tests. At the fact and information level, little attention is paid to a larger context that, among other things, gives meaning to facts and is the reason those facts were selected in the first place.

It is important to recognize that facts and information may contain an intrinsic appeal to children -- children may, for example, enjoy playing with numbers and with words. Yet, in most cases it is not the sounds of the words alone that is the appeal. Nor is it typically the numbers themselves that children enjoy. Rather, children like the way facts and information enable them to manipulate or gain control over their world, and they like the access to things and ideas that comes with knowing facts and possessing information.

Characteristics of Topics

A given set of facts is fairly meaningless unless it falls under some topic. For example, "In 1492 Columbus sailed the ocean blue," is a nice but meaningless rhyme until we put it in a context that tells us what it means to sail the ocean blue, what a Columbus is, and why one ought to care what Columbus did. The traditional academic topics of European and American history provide a context in which to understand the story of Columbus. As teachers, we must be cognizant that from a Scandinavian or Native American perspective those "facts" would take on a very different meaning.

Thus, topics begin to provide a context for facts and information. They also help us decide what information is important for children to learn. Organizing facts and information within topics allows us to guide children's engagement with the world and provide them with categories that adults have used to make sense of their world.

In this sense, topics are a way of organizing facts and discrete bits of information into classes of experiences. Typically, these facts and information are grouped into topics that fall within what Crittenden (1973) refers to as the "standard ways of knowing that humans have developed." These standard ways of knowing include the arts and the academic disciplines.

Topics can also be understood more broadly and across disciplines. For example, knowing the sequence of events of a particular story might help explain why honesty is the best policy; learning the days of the week can help one anticipate and prepare

for what is going to happen; and knowing the classifications of animals can be part of deciding what kind of pet would be best in one's home. In all cases, topics are ways of grouping, categorizing or making sense of facts and information. Moreover, when exploring topic questions, facts and information are an essential element to answering that question one way rather than another.

Characteristics of Themes

Themes provide us with ways to go beyond the disciplines with their standard ways of knowing and get at more fundamental human (existential) questions. In addition to studying a topic for what it tells us about that topic, we learn something about our selves, our society and what it means to be human. It is, for example, possible to study the Mayan culture and learn only about that culture: its mathematical system, its calendar, its social organization, and some of its artifacts. A thematic approach, however, would find ways to engage learners in dialogue between their own experiences and the life experiences of the Mayan people.

Themes allow learners to integrate the information and the topic within a context of the full range of human experience. Designing curriculum using themes provides the opportunity to engage students in a celebration of life, a conversation about what it means to be human, and a joint exploration of the world with their teachers. For the individual, thematic learning helps people grapple with their place in the world. At the aggregate level, thematic learning explores interrelations of people with institutions and the natural world.

In planning themes, teachers and curriculum developers need to carefully consider broad existential and developmentally appropriate questions. Sandra Stotsky (1993) raises a similar issue with her recommendations for selecting content for thematic units. She cautions against pairing topics that are similar but that do not work well as analogies. Stotsky uses the example of a middle school thematic unit that paired the study of the Holocaust against the Jews in Germany during World War II was paired with the study of Japanese Internment camps in the United States at the same time. In her example, drawn from an actual case, students read one literary work about the Holocaust and one about Japanese Internment.

This seems to be more than just an inappropriate pairing of topics based on a limited knowledge base of facts and information. In our typology, the focus on a single historic period and specific events in that period has the hallmark of a topic not a theme. Focusing on a single time period limits the ability to address any of the rich existential questions that would enable students to connect to and make sense of their own experiences and values with what they are learning in the classroom.

In discussing her objection, Stotsky wonders if children would not develop a better understanding of the Jewish experience and the inhumanity of the Holocaust by exploring literature, art, music of European and American Jewish communities as part of their thematic study. Her notion should also be extended to ask if the children also would not develop a better understanding of the Japanese-American experience by exploring similarly relevant literature. We, however,

think it is important to go further. We wonder if studying the experiences of more than one time period would increase the likelihood that children would begin to think about the conditions under which man's inhumanity to his neighbor can run rampant.

An other important feature of the learning that takes place within this type of thematic study is that teachers and children explore the moral dimensions of their emerging understanding of the world. In *Pets & Me*, students learn how animals live and die in the world in relation to humans. They also explore ways humans live in the world in relation to those animals they keep as pets. The moral and ethical issues of pet ownership are an integral part of the work students complete as they address the unit's four central concepts.

Because the full range of context for a unit of study is easily woven into the fabric of a thematic unit, teachers and children can explore specific topics in relation to the life experiences of the participants. For example, in the case of pets, children study the life cycle of the animal, its natural habitat, and its habitat as a pet. They also explore the ways in which it is represented in art, literature, music, television, and advertising. They examine the relationship between the animal and its human owner looking at both what the pet gets from the human and what the human gets from the relationship with the pet. After students understand how the pet lives in the world, they pursue in more depth standard scientific concepts such as classifications, anatomy, or physiology.

Figure 1.3 below demonstrates the application of this typology to the content of *Pets and Me*. Separating the content into the levels of facts and information, topics, and theme makes clear the potential

for connections among the three levels of contextualization. It is important to remember that this classification does not imply that teachers and children move among the levels in a set order nor does it imply that one or the other levels is most important or should be "mastered" before other levels are addressed.

Figure 1.3

CONTENT OF PETS AND ME

Teachers and children explore

1. Facts and Information: Classes of animals and individual animals as pets.

2. Topic: What is a Pet?

   a. Values of animals as pets
   b. Kinds of pets available
   c. Responsibilities of pet ownership
   d. Health issues related to pet ownership

3. Theme: How can we understand the relationships among humans, animals, and nature?

Thematic studies also have a role to play in the development of communities of learners (Senge, 1990; Lytle and Botel, 1988; Barth, 1990). Such communities are, typically, based on inquiry, speculative discourse, and deliberation in which participants work through the meaning of their studies.

In classrooms where curriculum is based on the acquisition of facts and information it is difficult to build a sense of shared inquiry. In such classrooms, answers to questions are based on a linear and

close-ended search for information. The inquiry is relegated to locating the correct authority, and there is no need for discourse or deliberation.

It is often easy to forget that facts and information are only the beginning. Working with topics connecting to broader themes, arriving at a "right answer," even if there is one, is beside the point or just the starting point. For example, one third grade classroom in Wylie, TX had a fish tank. The first day of the unit children began to ask whether the fish could be pets. After all, one child said, "I can't pet them." This generated a great deal of energized discussion. By the last day of the unit, the focus of the discussion had changed. The class had, in fact, decided that the fish were pets. After all, another student said, "We take care of them." But, other children wanted to know, "What about the sea horse?" The sea horse was also a fish, but the children did not recognize or classify it as such. The teacher didn't know how to answer and turned to ask one of the authors of *Pets and Me*. The response, "What do you think?" led to a vigorous discussion during which one child said, "I don't know how to relate to that sea horse. I guess I'll have to keep working on that!" The point, they had learned, is to look at an issue from multiple perspectives and wonder about the meaning of those perspectives for their lives and for what it means to be human.

THE THEMATIC UNIT IN USE

One issue of concern as the team developed the materials was how to write materials that would be useful to teachers and students

in a variety of contexts. Gibboney (in press) demonstrates clearly the problems that accompany attempts to adopt written/published curriculum or pedagogic techniques exactly as they are written or presented in training programs. He argues the most successful innovations are those that professionals adapt to their own political and educational contexts. This is not surprising. Teaching, like all practices (Macintyre, 1981), requires that the practitioner adjust curriculum or pedagogic techniques to fit the needs of her students, the expectations of teachers and administrators in the school and school district and the expectations of parents and the school board. Research clearly shows what happens when teachers attempt to structure learning experiences for students in ways that are inconsistent with educational norms and other organizational constraints in the school or district.

Consistent with this perspective, we explicitly designed our thematic unit to encourage every teacher to use the materials in ways she felt would work with her students and in her organizational context. This expectation is clear in the structure of each "lesson" and in the lay-out of the curriculum materials. Each "lesson" is presented descriptively, as a description of how the teachers on our design team actually taught the material in their classes. Moreover, each lesson is called a "sample process," the first structural indication that we expect adaptation, not adoption. Secondly, the page facing each "sample process" is blank except for the words "your modifications" at the top of each page. This page serves several purposes. First, it provides teachers with more than space in the margins for their modifications. Second, in giving ample

space, it makes it easier for teachers to keep a year-to-year record of their adaptations of the lessons and notes about what worked and what did not. Conversations with teachers who have used the materials indicate that every teacher used materials in her own ways —— often within organizational constraints. Several weeks before the unit was used as a school-wide thematic unit in the T. F. Birmingham School in Wylie, TX, teachers there met in grade-level teams and in cross-grade teams to discuss the unit and how they would adapt it to their individual classroom and team needs. We also spoke with them as part of a conference call and discussed their modifications. Some of those modifications were adaptations to the learning needs of their students. Other modifications were in reaction to Texas State mandates that certain skills content be taught. These teachers were incredibly creative in making adaptations that would fit both substantive and political demands.

Site tests in Norristown, PA, in Wylie, TX, in Nashville and in Chicago demonstrated that one of the powerful aspects of a thematic unit is the multiple entry points, both for teachers and for students. Teachers became involved in a variety of ways. Most frequently, they (and their students) were most fascinated by the topic, pets, or the opening topic question, "What is a pet?" This is not surprising. As we explained earlier in this paper, the natural attraction humans have for pets is part of the reason so many children's books are centered either in content or in characters around pets and animals. One first grade teacher immediately saw that she was able to group together many stories from her reading program and use them while doing other activities from *Pets & Me*. Consequently her class

completed many reading and writing activities in connection to pets. Her fourth grade partner, however, was much more interested in having live animals in the classroom. The fourth grade students read less about pets but had many opportunities to care for, observe, and ultimately deal with pet loss.

In almost every case, however, teachers and students developed an interest in the theme, namely, the relationships among humans, animals and nature. While this relationship is the theme, it is often most powerful in learning contexts to think in terms of a thematic question, "How can we understand the relationships among humans, animals, and nature?" For teachers on the curriculum development team, the theme emerged over tthe three year writing and revision process as we realized that the topic opened opportunities to explore broader questions. Indeed, each generation of the materials expanded the opportunities for students to explore the underlying theme through an expanded set of topics and acquiring more information about those topics. While teachers and students using the materials were initially also attracted by the topic, they quickly discovered that they could not answer the topic question without becoming immersed in the theme. One of the early activities is a reflection (Carini, 1982) in which students were asked to reflect on the phrase "A pet is a way of taking nature inside." One fourth grade student wrote:

> *A pet isn't like a ten speed bike. It's a toy that controls it's self* [sic.].

Another fourth grader wrote:

> *Taking a dog inside is like taking nature inside because a dog evolved from nature and its not man made so taking it inside is like taking in a part of nature. In lots of ways you can tell there not manmad [sic.] if man had made pets they wouldn't bite they wouldn't scratch or break things. But by not being manmade they're special and unlike and a lot more fun.*

Clearly, these students are working-through more than what a pet is. They are making connections and distinctions between the man-made world and the natural world while comparing and contrasting phenomenon from both. They are working-through their relationships with pets and with nature. In the process, they are implicitly moving from the topic to the theme.

Experience with this theme expanded as students acquired more factual information through reading and interviewing pet care professionals as well as caring for and observing an animal in class. The animals they cared for in class were not typically thought of as pets --spiders, land snails and monarch butterflies. Yet, with the experience in the classroom caring for these animals, students began to revise their concept of a pet and their understanding of their relationship to nature.

Starting with a topic question also led students and teachers to acquire more and more factual information. Indeed, teachers liked starting, as the unit does, with a conceptual issue/question that was immediately appealing to most students. The question, "What kind of animals can be pets?" serves as a powerful heuristic device to involve students in more specific, fact based, studies. These include comparative studies of what kinds of animals people keep as pets in different places (urban, suburban, rural), cultures, and times. It also

leads to questions about responsibilities of pet ownership which leads nicely to a project researching individual pets: life span, health issues, environmental needs, etc.

This "stream" of facts/information <-> topic <-> theme can be entered at any place, but it is important to acknowledge and attend to the entire stream, not just a particular part. If we start with facts, its important not to leave children at the level of new information, but rather to help them integrate it back into their understanding of the topic and of the broader theme. It is, after all, the topic and themes that provide a context for using facts and information in making sense of the world. Likewise, if we start with the topic question, facts are what form the substance for knowing about the topic. If we start with the thematic level, the topics and facts are necessary for understanding the relationships expressed by the theme.

As we noted earlier, thematic units are often referred to as important curriculum elements in the current literature on improving classroom practice in the elementary school (Zemelman, Daniels, and Hyde 1993). Advocates claim that thematic units will help overcome the problems with fragmentation in the curriculum, help students see the interrelationships among various ways of knowing, and provide "meaningful, conceptually and experientially rich ... explorations" (Zemelman, Daniels, and Hyde 1993, p 106).

Our experiences go much further. We see the development and use of thematic units as a way of capitalizing on the shifting paradigm of schools and schooling. The paradigm is shifting away from schools as teaching organizations to thinking of schools as

learning organizations. The understanding of thematic units we have developed enables teachers to move from teaching as a technical activity to teaching as a deeply personal and intellectual activity. It also enables students to experience learning that is deeply personal. It is through the exploration of the theme that teachers and students alike are able to transform their experiences.

We close with a quote from one of the teachers who worked with us in developing *Pets & Me*. It summarizes her thoughts and feelings at the end of an extended "lesson" during which her fourth grade students had raised monarch butterflies, planted a garden that attracts butterflies, and released the butterflies. Clearly, for this teacher, exploring human animal interactions had implications far beyond the specifics of the topics developed or facts students acquired: "The project helps the children connect to the environment and have an impact upon it. I hope it will help them to see school as a place where they can learn to make a better world. We will all see butterflies quite differently in the future." (Antonelli, et. al., 1991, p10.)

Bibliography

Altwerger, B. and Flores, B. (1994). Theme cycles: Creating communities of learners. Primary Voices K-6. 2 (1), 2-6.

Antonelli, M. et al. (1991) Pets & Me: A Thematic Learning Experience Built on the Relationship Between People and Animals . Philadelphia, PA: Center for School Study Councils, University of Pennsylvania.

Barth, R. (1990). Improving Schools From Within: Teachers, Parents, and Principals Can Make the Difference. San Francisco: Jossey Bass.

Brooks, J. and Brooks, M. G. (1993). In Search of Understanding: The Case For Constructivist Classrooms. Alexandria, VA: ASCD.

Bruner, J. (1986). Actual Minds, Possible Worlds . Cambridge, MA: Harvard.

Carini, P. (1982). The School Lives of Seven Children: A Five Year Study. Grand Forks, ND: University of North Dakota.

Crittenden, B. S. (1973) Education and Social Ideals: A Study in Philosophy of Education. Don Mills, Ontario: Longman Canada.

Gere, A. R., et. al. (1992) Language and Reflection: An Integrated Approach to Teaching English. NY: Macmillan.

Gibboney, R. (in press). The Stone Trumpet, A Story of Practical School Reform, 1960-1990. Albany, NY: State University of New York Press.

Harste, J., Short, K. and Burke, C. (1988). Creating Classrooms for Authors . Portsmouth, NH: Heinemann.

Lytle, S. and Botel, M. (1988). PCRP II: Reading, Writing, and Talking Across the Curriculum. Harrisburg, PA: The Pennsylvania Department of Education.

Mills, H. and Clyde, J. (1990). Portraits of Whole Language Classrooms. Portsmouth, NH: Heinemann.

MacIntyre, A. C. (1981) After Virtue . Notre Dame, IN: University of Notre Dame Press.

Pappas, C,, Keifer, B., and Levstik,L. (1990). An Integrated Language Perspective in the Elementary School: Theory into Action. White Plains, NY: Longman.

Perkins, D. and Blythe, T. (1994). Putting understanding up front. Educational Leadership . 51 (5), 4-7.

Pigdon, K. and Wooley, M. (1993). The Big Picture: Integrating Children's Learning. Portsmouth, NH: Heinemann.

Senge, P. (1990) The Fifth Discipline: The Art and Practice of the Learning Organization . New York: Doubleday.

Stotsky. S. (1993). *Linkages between Multicultural Education and the Development of Civic Responsibility in English and History Curricula: Strengths and Problems.* Paper presented at the Faculty Forum: La Salle University, Philadelphia, PA. December, 1993.

Zemelman, S., Daniels, H,. and Hyde, A. (1993). Best Practice: New Standards for Teaching and Learning in America's Schools. Portsmouth, NH: Heinemann.